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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,230	07/06/2001	Rolf Kaiser	MSFT-0577/167503.2	3984

41505 7590 10/05/2005

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EXAMINER

PHAM, HUNG Q

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/900,230

Applicant(s)

KAISER ET AL.

Examiner

HUNG Q. PHAM

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,9 and 87 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9 and 87 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments with respect to the rejection under 35 U.S.C. § 103 of claims 1-6, 8 and 9 filed 07/19/05 have been fully considered but they are not persuasive.

As argued by applicants:

*Applicants submit that the limitation of "using a set of fundamental musical properties that captures the user's preference in song content" (emphasis added) cannot be found in any of the cited art, since the cited art "captures the user's preferences using user input." In other words, whereas in the claimed invention the user's preferences are in song content that is leveraged to play "other songs" (claim 1) (see also Application, ¶ 37), in the cited art the user's preferences are input by the user without such leveraging.*

Examiner respectfully disagrees. As disclosed by Gjerdingen at FIG. 5A, step S501B, music samples and questions are provided to users, and users' responses are transferred to modeling module at step S504, wherein responses are *specific choice of user preferences in song content*, e.g., strongly disagree, neutral, strongly agree as in FIG. 7A1. The various responses provide values to a plurality of feature vectors that are used to define music attributes (Gjerdingen, Col. 12, Lines 25-29), e.g., emotion (Col. 12, Lines 39-49), voice (Col. 12, Lines 56-64), sound (Col. 13, Lines 4-13)... As seen, *specific choice of user preferences in song content is mapped using a set of fundamental musical properties, e.g., emotion, voice, sound... that captures the user's preference in song content*, e.g., strongly disagree, neutral, strongly agree. There is no need of *using user input* in the step of mapping.

For the above reasons, Examiner believed that rejection of the last Office action was proper.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-6, 8 and 9 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gjerdingen et al. [USP 6,539,395 B1] in view of Eyal et al. [USP 6,721,741 B1].**

Regarding claim 1, Gjerdingen teaches a method of searching content in a music domain (Gjerdingen, Abstract). The Gjerdingen method comprises the step of:

*providing a specific choice of user preferences in song content to a content provider* (as disclosed by Gjerdingen at FIG. 5A, questions are provided to users at step S501B, and users' responses are transferred to modeling module at step S504, wherein responses are *specific choice of user preferences in song content*, e.g., strongly disagree, neutral, strongly agree as in FIG. 7A1);

*mapping the specific choice of user preferences in a song analysis and matching system using a set of fundamental musical properties that captures the user's preferences in song content* (the various responses provide values to a plurality of feature vectors that are used to define music attributes (Gjerdingen, Col. 12, Lines 25-29), e.g., emotion (Col. 12, Lines 39-49), voice (Col. 12, Lines 56-64), sound (Col. 13, Lines 4-13)... As seen, *specific choice of user preferences in song content* is mapped using a set of fundamental musical properties, e.g., emotion, voice, sound... *that captures the user's preference in song content*, e.g., strongly disagree, neutral, strongly agree);

As illustrated at FIG. 12, step S1205 performs the claimed *scanning a database using the song analysis and matching system to find other songs that have a similar mapping of musical properties* (Gjerdingen, Col. 31, Lines 34-37) and a music set including the song obtained from the database as *other songs that have a similar mapping of musical properties* is presented to the user (Gjerdingen, Col. 32, Lines 1-4).

The missing of Gjerdingen is the claimed *playing automatically to the user* the other songs that have a similar mapping of musical properties.

Eyal teaches a method of searching media content includes music, video clips (Eyal, Col. 1, Lines 10-22). As illustrated at FIG. 13, a user is provided with a user interface for receiving media sorted according to one or more categories, such as type of music. In response to the selection of a category, a play-list is created and sent to the user terminal for playing consecutively and automatically.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the Eyal technique of automatically playing the result list of media and using cookies for a personal favorite play-list into Gjerdingen method in order to allow a user evaluating the result by listening and retrieving favorite media clips.

Regarding claim 2, Gjerdingen and Eyal, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Eyal further discloses *the user requests a particular song which the user finds pleasing and the song analysis and matching system automatically plays a set of songs with similar fundamental musical properties as the chosen song* (Eyal, Col. 36, Lines 32-56).

Regarding claim 3, Gjerdingen and Eyal, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Gjerdingen further discloses *the user specifies the type of music preferred by defining a partial element of a song wherein the element is selected from a group of song elements including mood descriptors, tempo descriptors and weight descriptors* (Gjerdingen, FIG. 10A).

Regarding claim 4, Gjerdingen and Eyal, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Eyal further discloses *the user specifies a plurality of analysis elements selected from a group of analysis elements including a partial element of a song, a song, an album, an artist and a genre* (Eyal, FIG. 21).

Regarding claim 5, Gjerdingen and Eyal, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Eyal further discloses *the user while listening to a particular song transmits a "get more" command resulting in the musical properties of the currently playing song being captured by the analysis and matching system and automatically playing to the user other songs that have a similar mapping of musical properties as the currently playing song* (Eyal, FIG. 13).

Regarding claim 6, Gjerdingen and Eyal, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Gjerdingen further discloses *the user may indicate an affinity for music whose corresponding attribute lies more in a specified direction for the musical property* (Gjerdingen, FIG. 10A).

Regarding claim 8, Gjerdingen and Eyal, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Gjerdingen further discloses *the user automatically receives recommendations that match trends detected by the song analysis and matching system* (Gjerdingen, Col. 30, Lines 34-42).

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Regarding claim 9, Gjerdingen and Eyal, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Gjerdingen further discloses *the song analysis and matching system determines a user profile based on the historical record of past decisions made by the user* (Gjerdingen, FIG. 5F).

Regarding claim 87, Gjerdingen and Eyal, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Eyal further discloses the steps of *accessing a historical record to recover previous user preferences* (FIG. 18, Col. 31, Line 61-Col. 32, Line 19, a personal favorite play-list as *a historical record* contains selected media clips according to *user preferences*, after adding clips to personal favorite play-list, media clips are read back or *recovered* at box 1640 when the user selects to play back media clips at box 1630, and the read back media clips are *music in accordance with previous user preferences*), and *restarting the playing of music by the analysis and matching system in accordance with previous user preferences* (the clips are play back at box 1650, Col. 32, Lines 5-11).



***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E. BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HUNG Q PHAM  
Examiner  
Art Unit 2162

September 24, 2005



SHAHID ALAM  
PRIMARY EXAMINER